REMARKS

The examiner is thanked for the performance of a thorough search. By this amendment, Claims 1, 4, 8-14, 17, 20, 23, 26-28, 35, 37-45, and 48-50 have been amended. No claims have been cancelled or added. Claim 7 has been allowed. Hence, Claims 1-6 and 8-52 are pending in the application. The amendments to the claims as indicated herein do not add any new matter to this application. Furthermore, amendments made to the claims as indicated herein have been made exclusively to improve readability and clarity of the claims and not for the purpose of overcoming alleged prior art or overcoming rejections made by the Office Action. Any cancellations in the claims have been made for the purpose of removing unnecessary material from the claims.

Each issue raised in the Office Action mailed July 14, 2008 is addressed hereinafter.

I.   ISSUES NOT RELATING TO PRIOR ART

A.   RESPONSE TO PRELIMINARY AMENDMENT

As noted, the preliminary amendment to the claims filed August 3, 2004 stated that Claims 26-81 were added at the preliminary amendment. However, only Claims 1-52 were provided. As such, it was proper to address only Claims 1-52 in the Office Action.

B.   SUPPLEMENTAL OATH OR DECLARATION

The Office Action alleges that "Applicant is required to provide a supplemental oath or declaration under 37 CFR 1.67 referring to the preliminary amendment" because the preliminary amendment was filed after the filing date of the application. It is respectfully requested that this requirement be reconsidered.

The MPEP states that "[i]f the preliminary amendment contains subject matter not otherwise included in the specification and drawings of the application, applicant must provide a supplemental oath or declaration under 37 CFR 1.67 referring to such preliminary amendment." As indicated below in connection with discussion on the 35 U.S.C. § 112 rejections of the Office

Seq. No. 8503   18

Action, the subject matter in the preliminary amendment is supported by the specification and drawings originally submitted with the patent application. Thus, it is improper to require Applicants to provide a supplemental oath or declaration explicitly referring to the preliminary amendment. Reconsideration is respectfully requested.

C.   DRAWINGS

Corrected drawings are submitted in conformance with the requirements of the Office Action. Specifically, Fig. 1 is amended to include the legend "--Prior Art--" as indicated by the Office Action.

D.   SPECIFICATION

All issues of new alleged matter are addressed below in Sections F and G.

E.   35 U.S.C. § 101

Claims 8-13, and 38-42 are rejected under 35 U.S.C. § 101 as allegedly directed to non-statutory subject matter. Claims 8-13, and 38-42 now recite "computer-readable volatile or non-volatile medium." The application specification distinguishes between volatile or non-volatile (storage) media, and transmission media. Thus, Claims 8-13, and 38-42 as amended do not include transmission media and are directed to articles of manufacture, which are statutory subject matter. Reconsideration is respectfully requested.

F.   35 U.S.C. § 112, CLAIMS 26-52

The Office Action objects to the preliminary amendment filed on August 3, 2004 as allegedly introducing new matter into the disclosure in the section of the Office Action titled "Specification." Furthermore, the Office Action rejects Claims 26-52 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. These objections and rejections are respectfully traversed. For clarity, only one reference in the

Specification has been used, at times, to show support for the claims in question, but other references could be used to support these claims.

Claims 27, 29-33, 36, 39, 41-42, 44, 46-47, 49, and 51-52

The Office Action has failed to make out a prima facia case of unpatentability under 35 U.S.C. § 112 with regard to Claims 27, 29-33, 36, 39, 41-42, 44, 46-47, 49, and 51-52 because no reasoning for these rejections was proffered by the Office Action and no supporting evidence was presented to support these rejections. Applicant respectfully requests that the rejections under 35 U.S.C. § 112 with respect to Claims 27, 29-33, 36, 39, 41-42, 44, 46-47, 49, and 51-52 be withdrawn.

Claims 26, 38, 43, and 48

As amended, Claim 26 recites:

A method of restarting resource reservation protocol (RSVP) processes in multiple network devices, the method comprising the computer-implemented steps of:
receiving a first downstream message containing first path data;
based on said first path data, generating first recovery data, wherein **the first recovery data includes data identifying** a neighbor RSVP node ~~and a target RSVP node;~~
sending a second downstream message containing the first recovery data to the neighbor RSVP node;
receiving a first upstream message from the neighbor RSVP node containing second recovery data, **wherein the second recovery data** ~~identifies an original RSVP route~~ **includes a second path data**; and
based on the second recovery data, **updating the first path data to correspond to the** ~~original RSVP route~~ **second path data**.

The Office Action alleges that the above-bolded features of Claim 26 are not supported by the Specification or the Drawings.

The Office Action alleges that "the first recovery data includes data identifying . . . a target RSVP node" is not described in the Specification as filed. This is incorrect. However, the clause "and a target RSVP node" has been cancelled from Claim 26 for clarity because it was unnecessary material in the claim. Furthermore, the Specification discloses a "first recovery

data" in paragraph [0053], describing a "Recovery ERO object." Thus, the Specification supports at least "the first recovery data" recited by Claim 26.

The Office Action alleges that "wherein the second recovery data identifies an original RSVP route" is not described in the Specification. This is incorrect. In order to clarify the claim, this feature has been amended to recite "wherein the second recovery data includes a second path data." This feature of Claim 26 is disclosed in the Specification, paragraph [0056], which states "the neighbor node retrieves the **ERO object** as it was previously created by the restarting node and formats a **new Recovery ERO object**." The disclosure of a "new Recovery ERO object" can correspond to "the second recovery data" of Claim 26 and the disclosure of the "ERO object" can correspond to a "second path data" of Claim 26. Thus, the Specification supports "wherein the second recovery data includes a second path data," as recited by Claim 26.

The Office Action alleges that "updating the first path data to correspond to the original RSVP route" is not described in the Specification. This is incorrect. In order to clarify the claim, this feature has been amended to recite "updating the first path data to correspond to the second path data." This feature is supported by the Specification in paragraph [0060], stating that when a restarting node receives a Recovery ERO object sent to it from downstream, the node "uses [the object's] content to update the ERO in the associated Path State." Thus, the Specification supports "updating the first path data to correspond to the second path data" as recited by Claim 26.

Claims 38, 43, and 48 recite features substantially similar to those of Claim 26 and therefore comply with the written description requirement of 35 U.S.C. § 112 for at least the same reasons as Claim 26.

Claim 37

As amended, Claim 37 recites, in part:

receiving a first RSVP PATH message with a Recovery Label from an upstream node, wherein
the first RSVP PATH message includes **an Explicit Route Object** ~~containing data~~
~~identifying a target RSVP node~~;
identifying forwarding data associated with the first RSVP PATH message;
based on the forwarding data, identifying a neighbor RSVP node;
performing a partial expansion of the Explicit Route Object of the first RSVP PATH
message to include the identified neighbor RSVP node ~~and the identified target~~
~~RSVP node~~;

The Office Action alleges that "an Explicit Route Object containing data identifying a

target RSVP node" is not described in the Specification. This is incorrect. However, the clause

"containing data identifying a target RSVP node" has been cancelled from Claim 37 for clarity

because it was unnecessary to the claim. Furthermore, "an Explicit Route Object" is taught by

the Specification in paragraphs [0049]-[0053]. Thus, the Specification supports at least "an

Explicit Route Object" as recited by Claim 37.

The Office Action further alleges that "identifying forwarding data associated with the

first RSVP PATH message" is not described in the Specification. This is incorrect. Paragraph

[0051] of the Specification teaches "[w]hen a node . . . receives a Path message . . . , it searches

for a matching forwarding state." Thus, the Specification supports "identifying forwarding data

associated with the first RSVP PATH message" as recited by Claim 37.

The Office Action alleges that "based on the forwarding data, identifying a neighbor

RSVP node" is not described in the Specification. This is incorrect. Paragraph [0052] of the

Specification teaches including in an ERO "the strict next hop that is contained in the forwarding

state." It is well known in the art, and indeed RFC 3209 states, that a strict hop is one that must

be taken with no intervening hops. Thus, a strict hop represents a neighboring RSVP node.

Therefore, because the Specification indicates that the strict hop was contained in the forwarding

state, the Specification supports "based on the forwarding data, identifying a neighbor RSVP node" as recited by Claim 37.

Finally, the Office Action alleges that "performing a partial expansion of the Explicit Route Object of the first RSVP PATH message to include the identified neighbor RSVP node and the identified target RSVP node" is not described in the Specification. This is incorrect. However, the clause "and the identified target RSVP node" has been cancelled from Claim 37 for clarity because it was unnecessary to the claim. Furthermore, "performing a partial expansion of the Explicit Route Object of the first RSVP PATH message to include the identified neighbor RSVP node" is supported by the Specification in paragraphs [0051]-[0052]. Specifically, Paragraph [0052] teaches that a node "performs a partial ERO expansion" on ERO data indicated by Paragraph [0051] to be from a "Path message." Also, as explained above, the "next strict hop" included in the ERO expansion of Paragraph [0052] is a neighbor RSVP node. Thus, the Specification supports "performing a partial expansion of the Explicit Route Object of the first RSVP PATH message to include the identified neighbor RSVP node," as recited by Claim 37.

Claims 28, 40, 45, and 50

The Office Action alleges that "causing the neighbor RSVP node to determine if the second downstream message is associated with incoming RSVP PATH data" recited by Claim 28 is not supported in the Specification. This is incorrect. In Paragraph [0056], the Specification indicates that if a message sent downstream to a neighbor node "has associated incoming Path and forwarding states," it must react in a particular manner. Thus, the Specification teaches "causing the neighbor RSVP node to determine if the second downstream message is associated with incoming RSVP PATH data" recited by Claim 28.

Claims 40, 45, and 50 recite features substantially similar to those of Claim 28 and therefore comply with the written description requirement of 35 U.S.C. § 112 for at least the same reasons as Claim 28.

Claim 34

The Office Action alleges that "storing the results of the partial expansion in a Recovery Explicit Route Object" recited by Claim 34 is not supported in the Specification. This is incorrect. In Paragraph [0052]-[0053], the Specification teaches "perform[ing] a partial ERO expansion" and then "includ[ing] the result . . . in the Recovery ERO object." Thus, the Specification teaches "storing the results of the partial expansion in a Recovery Explicit Route Object" recited by Claim 34.

Claim 35

The Office Action alleges that "the loose hop identifies a target RSVP node" is not described in the Specification. However, this feature has been cancelled from Claim 37 for clarity because it was unnecessary to the claim. Thus, the rejection of Claim 35 under 35 U.S.C. § 112 is moot.

Conclusion

For at least the foregoing reasons, it is respectfully requested that the rejections of Claims 26, 28, 34-35, 37-38, 40, 43, 45, 48, and 50 under 35 U.S.C. § 112 be withdrawn.

G.   35 U.S.C. § 112, CLAIMS 4, 11, 17, AND 23

Claims 4, 11, 17, and 23 are rejected under 35 U.S.C. § 112, second paragraph as allegedly indefinite. This rejection is respectfully traversed. Claims 4, 11, 17, and 23 have been amended to read "the step of storing information," which has antecedent basis in the claims from which each of these claims depend. Thus, Claims 4, 11, 17, and 23 are free of 112 issues and it is respectfully requested that this rejection be withdrawn.

II.   ISSUES RELATING TO PRIOR ART

       A.   CLAIMS 1-3, 8-10, 14-16, AND 20-22

       Claims 1-3, 8-10, 14-16, and 20-22 are rejected under 35 U.S.C. § 102(e) as being

unpatentable over U.S. Patent No. 7,359,377 to Kompella et al. ("*Kompella*"). This rejection is

respectfully traversed.

       Claim 1 recites:

A method of restarting resource reservation protocol (RSVP) processes in multiple network
       devices, the method comprising the computer-implemented steps of:
       entering a recovery mode;
       **sending a Hello message to a first neighbor RSVP node, after entering the recovery
               mode, wherein the Hello message comprises a non-zero Recovery Time value**;
       completing the recovery mode;
       **sending a Hello message to the first neighbor RSVP node, after completing the
               recovery mode, wherein the Hello message comprises a Recovery Time value
               of zero.**

At least the above-bolded features of Claim 1 are not taught or suggested by *Kompella*.

       The Office Action cites *Kompella* Fig. 8 and Col. 23 Lines 6-10 for teaching "sending a

Hello message to a first neighbor RSVP node, after entering the recovery mode, wherein the

Hello message comprises a non-zero Recovery Time value" as recited by Claim 1. This is

incorrect.

       This section of *Kompella* describes the conventional meaning of a "Recovery Time"

value carried by a Hello message, indicating that it "is the time . . . that the restarting node is

willing to retain its MPLS forwarding state that it preserved across the restart of its control

component." This bare reference to a potentially non-zero Recovery Time value does not equate

to "sending a Hello message to a first neighbor RSVP node," as recited by Claim 1.

Furthermore, *Kompella* fails to teach or suggest "sending a Hello message to a first neighbor

RSVP node, **after entering the recovery mode**" as recited by Claim 1. Thus, *Kompella* fails to

teach or suggest "sending a Hello message to a first neighbor RSVP node, after entering the

recovery mode, wherein the Hello message comprises a non-zero Recovery Time value" recited by Claim 1.

The Office Action cites *Kompella* Col. 23 line 11 for teaching "sending a Hello message to the first neighbor RSVP node, after completing the recovery mode, wherein the Hello message comprises a Recovery Time value of zero" as recited by Claim 1. This is also incorrect.

The cited portion of *Kompella* describes the abstract idea of a "Recovery Time" value being set to zero. This section of *Kompella* fails to teach "sending a Hello message to the first neighbor RSVP node" as recited by Claim 1. Furthermore, *Kompella* fails to teach or suggest "sending a Hello message to the first neighbor RSVP node, **after completing the recovery mode**" as recited by Claim 1. Thus, *Kompella* fails to teach or suggest "sending a Hello message to the first neighbor RSVP node, after completing the recovery mode, wherein the Hello message comprises a Recovery Time value of zero" recited by Claim 1.

Thus, Claim 1 recites an explicit order of particular steps that are not found in *Kompella*.

Independent Claims 8, 14, and 20 recite features substantially similar to those of Claim 1, and are thus patentable over the cited art for at least the same reasons as Claim 1. Furthermore, Claims 2-3, 9-10, 15-16, and 21-22 each depend from one of these independent claims. Thus, these dependent claims are patentable over *Kompella* for at least the same reasons as those discussed in connection with the independent claims upon which they depend. As is discussed above, these independent claims recite features that *Kompella* does not disclose. Therefore, Claims 2-3, 9-10, 15-16, and 21-22, which inherit these features, are patentable over *Kompella*. Reconsideration is respectfully requested.

B.   CLAIMS 26, 38, 43, AND 48

Claims 26, 38, 43, and 48 are rejected under 35 U.S.C. § 102(e) as being unpatentable

over U.S. Patent No. 7,317,731 to Seddigh et al. ("*Seddigh*"). The rejection is respectfully

traversed.

Claim 26 recites:

A method of restarting resource reservation protocol (RSVP) processes in multiple network
devices, the method comprising the computer-implemented steps of:
    receiving a first downstream message containing first path data;
    based on said first path data, **generating first recovery data, wherein the first recovery
        data includes data identifying a neighbor RSVP node**;
    **sending a second downstream message containing the first recovery data to the
        neighbor RSVP node**;
    **receiving a first upstream message from the neighbor RSVP node containing second
        recovery data, wherein the second recovery data** <u>**includes a second path data**</u>**;
        and**
    **based on the second recovery data, updating the first path data to correspond to the
        <u>second path data**</u>.

At least the above-bolded features of Claim 26 are not taught or suggested by *Seddigh*.

The Office Action cites *Seddigh* Fig. 4 and Col. 6 Lines 52-53 for teaching "receiving a

first downstream message containing first path data" recited by Claim 26. This is incorrect.

The pertinent portion of *Seddigh* describes a node's graceful restart including recognizing

that a restarted node is alive again and sending to the node a PATH message "with the same

upstream label as before but with the new SUGGEST_LABEL that is same [sic] as the label

object previously sent." The Office Action indicates that the "suggested label" in the cited

portion of *Seddigh* is equivalent to a "first path data" of Claim 26. However, the label object of

Seddigh is not path data because a label object (in the context of MPLS) is an index into a table

of interfaces, not a path to a destination. A mere index into a table is not "path data" as recited

by Claim 26. Thus, *Seddigh* fails to teach or suggest "receiving a first downstream message

containing first path data" recited by Claim 26.

The Office Action cites *Seddigh* Fig. 4, and Col. 6 Line 55, for teaching "generating first recovery data, wherein the first recovery data includes data identifying a neighbor RSVP node" recited by Claim 26. This is incorrect.

The cited section of *Seddigh* describes "recreat[ing a] reverse traffic outLabel entry" for a table in a node. Thus, the art describes the recreation of a label object, which is an index into a table. Such data does not "identify[] a neighbor RSVP node" recited by Claim 26. Further, according to *Seddigh* Col 6 Lines 37-39, its Fig. 4 "illustrates . . . a portion of a network 400 that is set up . . . [with] a number of LSR nodes." Thus, while *Seddigh* refers to neighboring nodes, it does not illustrate a "generat[ed] first recovery data [that] includes data identifying a neighbor RSVP node" recited by Claim 26. The mere reference to nodes or recreating a label object is not sufficient to teach this feature of Claim 26. Thus, *Seddigh* fails to teach or suggest "generating first recovery data, wherein the first recovery data includes data identifying a neighbor RSVP node" recited by Claim 26.

The Office Action cites *Seddigh* Fig. 4 and Col. 7 Lines 1-2 for teaching "sending a second downstream message containing the first recovery data to the neighbor RSVP node," as recited by Claim 26. This is also incorrect.

Fig. 4 of *Seddigh* shows PATH, RESV, and HELLO messages passing between nodes. The cited section of *Seddigh* describes sending a PATH message to a downstream node. However, sending a PATH message downstream does not equate to "sending a second downstream message **containing the first recovery data**" recited by Claim 26. Thus, *Seddigh* fails to teach or suggest "sending a second downstream message containing the first recovery data to the neighbor RSVP node," as recited by Claim 26.

The Office Action cites *Seddigh* Fig. 4 and Col. 7 Lines 9-11 for teaching "receiving a first upstream message from the neighbor RSVP node containing second recovery data, wherein the second recovery data includes a second path data" recited by Claim 26. This is incorrect.

The cited section of *Seddigh* states that a label object sent from Node C to Node B is, according to Node B's perspective, "the outgoing label for the forward direction traffic." The information sent by Node C to Node B is a label object, and, as previously discussed, a label object can be an index into a table, but not a path. Thus, *Seddigh's* description indicates that the label is an index into the information regarding outgoing forward direction traffic. However, this is not sufficient to teach the feature in question because, according to Claim 26, the information sent between nodes "includes a second path data." Thus, *Seddigh* fails to teach or suggest "receiving a first upstream message from the neighbor RSVP node containing second recovery data, wherein the second recovery data includes a second path data" recited by Claim 26.

The Office Action cites *Seddigh* Col. 7 Lines 15-25 for teaching "based on the second recovery data, updating the first path data to correspond to the second path data" recited by Claim 26. This is incorrect.

The cited portion of *Seddigh* describes Node B ascertaining the "inLabel entry for upRsb table 428 and update[ing] its label manager accordingly." However, the inLabel entry of *Seddigh* does not equate to the "second recovery data" of Claim 26. Furthermore, updating a "label manager" does not equate to "updating the first **path data** to correspond to the second path data" as recited by Claim 26. Thus, *Seddigh* fails to teach or suggest "based on the second recovery data, updating the first path data to correspond to the second path data" recited by Claim 26.

Independent Claims 38, 43, and 48 recite features substantially similar to those of Claim 26, and are thus patentable over the cited art for at least the same reasons as Claim 26.

C.   CLAIMS 4, 6, 11, 13, 17, 19, 23, AND 25

Claims 4, 6, 11, 13, 17, 19, 23, and 25 are rejected under 35 U.S.C. § 103(a) as being

unpatentable over *Kompella* in view of *Seddigh*. The rejection is respectfully traversed. Claims

4, 6, 11, 13, 17, 19, 23, and 25 depend from independent Claims 1, 8, 14, and 20 discussed

above, and are patentable over the cited references for at least the same reasons as those

discussed in connection with these independent claims. As is discussed above, these independent

claims recite features that *Kompella* does not disclose. The Office Action does not even allege

that *Seddigh* discloses these features. Therefore, Claims 4, 6, 11, 13, 17, 19, 23, and 25, which

inherit these features, are patentable over *Kompella* and *Seddigh,* even when considered in

combination, under 35 U.S.C. § 103(a).

D.   CLAIMS 27, 29-33, 44, 46-47, 49, AND 51-52

The Office Action indicates a rejection of Claims 27, 29-33, 44, 46-47, 49, and 51-52 in

the Office Action summary, but fails to make out a prima facia case of unpatentability with

respect to these claims. Specifically, no references to potential prior art are made with respect to

these claims, and no other evidence is offered in the Office Action to support their rejection. As

such, it is respectfully requested that rejections with respect to Claims 27, 29-33, 44, 46-47, 49,

and 51-52 be withdrawn.

III.   CONCLUSIONS & MISCELLANEOUS

For the reasons set forth above, all of the pending claims are now in condition for

allowance. The Examiner is respectfully requested to contact the undersigned by telephone

relating to any issue that would advance examination of the present application.

A petition for extension of time, to the extent necessary to make this reply timely filed, is

hereby made. If applicable, a law firm check for the petition for extension of time fee is enclosed

herewith. If any applicable fee is missing or insufficient, throughout the pendency of this

application, the Commissioner is hereby authorized to change any applicable fees and to credit

any overpayments to our Deposit Account No. 50-1302.

Respectfully submitted,

HICKMAN PALERMO TRUONG & BECKER LLP

Dated: September 26, 2008

/ChristopherJPalermo#42056/
Christopher J. Palermo
Reg. No. 42,056

2055 Gateway Place Suite 550
San Jose, California 95110-1083
Telephone No.: (408) 414-1080
Facsimile No.: (408) 414-1076